

S. R. Sapiro, Manager of Operations
Oak Ridge

AUG 21 1956

E. J. Bloch, Director of Production
Washington

G. F. Quinn

BORON-10**SYMBOL: FT:ES**

Subsequent to my memo of May 15, which advised you of the Reactor Development Division's enriched boron requirements, there has developed some misunderstandings concerning the B-10 program which deserve further attention:

- 1) the distribution of the Reactor Development requirements during the five-year period covered in my memo
- 2) the requirements for programs other than those of the Division of Reactor Development and
- 3) your authority to make shipments in accordance with established requirements.

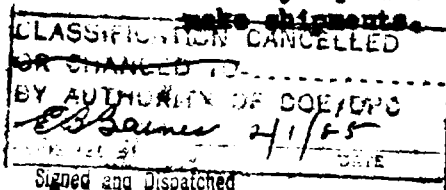
The purpose of this memo is to attempt to clarify the above points and provide you with further guidance concerning future activities devoted to the production and distribution of enriched boron.

Reactor Development Requirements

The cumulative Reactor Development requirements as shown in my May 15 memo are unchanged. As the metallurgical and reactor tests being conducted by the Division of Reactor Development progress, we may expect some shift in the timing of the requirements of each of the four sub-programs.

In order to provide the necessary flexibility, you are authorized to treat the total Fiscal Year 1956 and 1957 requirements in a cumulative manner, and make shipments during FY 1957 up to the difference between the total two year (FY '56 and '57) requirements as shown in my May 15 memo and actual shipments made during FY 1956.

Your memo of May 18, subject: Elemental B-10 for Lid Tank Facility, ORNL, requested authority to transfer 400 pounds of B-10 from Hooker to ORNL for ANP shielding studies. In accordance with the above, and as the total FY 1956 and 1957 requirement for ANP is 180 kgs, almost exactly equal to the request, you have the necessary authority to make shipments.



077223

S. R. Sapirie

- 2 -

AUG 31 1956

Research Requirements

The Division of Research has informed us that the requirements for the 5000 Program as shown in your memo of May 18, subject: ORNL Boron-10 Requirements - coupled with the 25 kgs. transferred to the research stockpile at ORNL during FY 1956 will suffice their needs and have their concurrence. Therefore these diversions are also approved.

X Biology and Medicine Requirements

The Division of Biology and Medicine estimates their requirements for enriched boron at 50 kgs. per year for the three-year period FY 1956 through FY 1958. These requirements are for the Dosimetry Program and may be supplied for such use upon demand. In addition, Biology and Medicine advises of a possible requirement for five pounds of B-10 for Military Effects Tests in 1956 and an additional 5 kgs. of B-10 for the Civil Effects Tests. These potential requirements should be included in your production planning; however, their transfer is not yet approved.

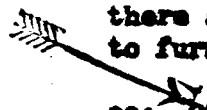
For further clarification of the B&M enriched boron requirements, you are referred to your copy of Dr. Durham's memo to us of August 3, subject: "Japanese Dosimetry Program".

Civilian Application Requirements

There are presently no requirements for licensees in the Civilian Application program other than those shown under the CPB item of the Reactor Development requirements given in my May 15 memo. This material is to be used for work to be done by ANL for Detroit Edison, et al, as part of the Power Demonstration Reactor Program. Requests up to the amount shown for FY 1957 may be supplied to ANL if the stated use of the material is in conformance with the above.

I would like to note that we are holding all requests for cost estimates for enriched boron pending your reply to our July 3 memo, subject: Specifications for Boron-10. It would be appreciated if your answer were expedited.

We hope that this memo serves to clarify the points outlined above. If there are any other questions regarding this subject we will be pleased to furnish the necessary guidance.

cc:  Biology & Medicine
Civilian Application
Reactor Development
Research

~~CONFIDENTIAL~~
~~CONFIDENTIAL~~
~~CONFIDENTIAL~~
~~CONFIDENTIAL~~

5000739